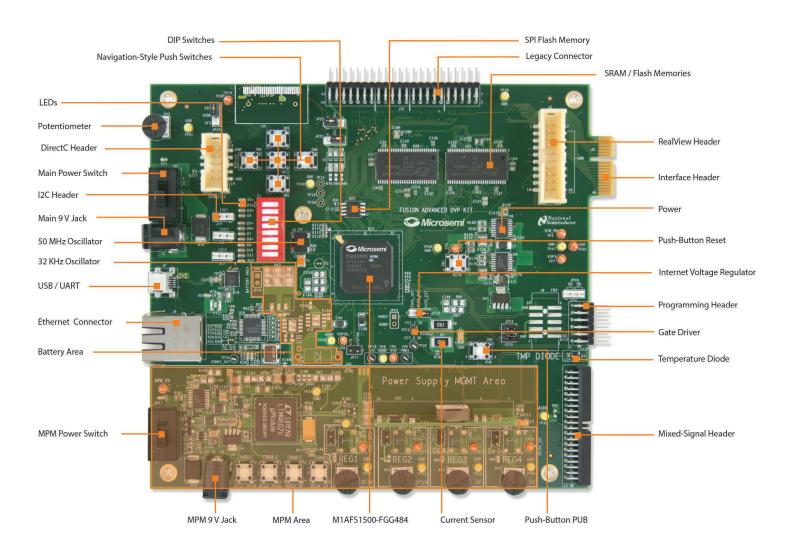


Fusion Advanced Development Kit Quickstart Card

Kit Contents—M1AFS-ADV-DEV-KIT-PWR-2 (RoHS-compliant)

Quantity	Description
1	Fusion Advanced Development Board with ARM® Cortex™-M1-enabled M1AFS1500-FGG484
1	FlashPro3-compatible low-cost programming stick (LCPS)
2	USB A to mini B cables
1	9 V Power supply



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Overview

The Fusion Advanced Development Kit provides an excellent platform for developing microprocessor applications and other system management applications. The M1AFS1500 ARM-enabled Fusion mixed-signal flash FPGA on the board supports ARM Cortex-M1, Core8051s, and other soft IP processors.

The board supports the following functions:

- Power-up detection
- System diagnostics
- Thermal management
- Remote communications

- Power sequencing
- Clock generation and management
- Sleep modes

Hardware Features

- Ethernet and USB-to-UART interface for communication with the Fusion FPGA
- SRAM, parallel flash, and SPI flash
- Temperature diode, potentiometer, and

pulse- width modulation (PWM) circuit

 Mixed-signal header for several daughter boards to be attached for extended mixed-signal applications

Pre-Programmed Demo Design

The Fusion Advanced Development Kit includes support for the Mixed-Signal Power Manager (MPM) GUI. The lower section of the board, marked Power Supply MGMT Area, can be used in conjunction with the MPM design example and demonstration to determine voltage sequencing and power management. See the Documentation Resources section for more information.

Jumper and Switch Settings

Before powering up the M1AFS-ADV-DEV-KIT-PWR-2 for the first time, make sure the switches and jumpers are in the following factory-set positions:

- Switches: All switches are push-button except for the power-on switches, so no settings required.
- JP10 (2-3), JP18 (2-3), JP20 (1-2), JP21 (1-2),
- JP22 (1-2), JP23 (1-2), JP24 (1-2) are installed.
- All others are not installed.

For a full description of all jumpers, see the Documentation Resources section for more information.



Software and Licensing

Libero® SoC Design Suite offers high productivity with its comprehensive, easy-to-learn, easy-to-adopt development tools for designing with Microsemi's low power Flash FPGAs and SoC. The suite integrates industry standard Synopsys Synplify Pro® synthesis and Mentor Graphics ModelSim® simulation with best-in-class constraints management and debug capabilities.

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Documentation Resources

For more information about the Fusion Advanced Development Kit, including user's guides, tutorials, and design examples, see www.microsemi.com/products/fpga-soc/design-resources/dev-kits/fusion/fusion-advanced-development-kit#documents

Support

Technical support is available online at www.microsemi.com/soc/support and by email at soc_tech@microsemi.com

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